

REMARKS

This paper is being presented in response to the non-final official action dated June 15, 2005, wherein: (a) claims 1-13 are pending; (b) claims 1 and 6-9 have been rejected under 35 USC § 103(a) as being obvious over an alleged admission of prior art in view of Kojima et al. U.S. Patent No. 5,766,498 (the "Kojima patent"); (c) claims 2, 3, 10, 12, and 13 have been rejected under § 103(a) as being obvious over the alleged admission of prior art in view of the Kojima patent as applied to claims 1 and 6-9, above, and further in view of Satou et al. U.S. Patent No. 4,676,194; (d) claim 4 has been rejected under § 103(a) as being obvious over the alleged admission of prior art in view of the Kojima patent as applied to claims 1 and 6-9, above, and further in view of Dunham U.S. Patent No. 6,626,998; and, (e) claim 5 has been rejected under § 103(a) as being obvious over the alleged admission of prior art in view of the Kojima patent as applied to claims 1 and 6-9, above, and further in view of Mena U.S. Patent No. 5,518,572. Reconsideration and withdrawal of the § 103(a) rejections are respectfully requested in view of the foregoing amendments and following remarks.

The action provides no statutory basis for the rejection of dependent claim 11. Therefore, claim 11 is understood to be free of the art.

Claims 1, 2, 5-7, 9, and 10 have been amended to more clearly recite the subject matter of the present invention. Furthermore, the preamble of each of claims 2-6 has been amended to mirror the preamble of claim 1. No new matter has been introduced by the foregoing amendments.

As clearly shown in figures 6 and 7 of the application, and as recited in amended claims 1, 7 and 10, a shower head of the present invention has a cylinder part surrounded by a plasma excitement electrode and a radial cone part surrounded by an ion extraction electrode to improve cleaning efficiency in a batch type atomic layer deposition apparatus. In contrast, none of the applied references teaches or suggests a shower head having the cylinder part surrounded by a plasma excitement electrode and a radial cone part surrounded by an ion extraction electrode. Because the combined disclosure of the applied references does not teach or suggest each of the elements recited in independent claims 1, 7, and 10, that disclosures cannot render the claimed invention *prima facie* obvious. *See generally* MPEP § 2143 (8th ed., May 2004). Given the deficiencies in the applied references, it is respectfully submitted that the claimed invention is not *prima facie* obvious.

Accordingly, the applicant respectfully requests entry of amendments to claims 1-7, 9, and 10, reconsideration and withdrawal of the § 103(a) rejections, and allowance of all pending claims 1-13.

Should the examiner wish to discuss the foregoing, or any matter of form or procedure in an effort to advance this application to allowance, she is urged to contact the undersigned attorney.

Respectfully submitted,

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